## ABSTRACT OF THE DISCLOSURE

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To provide probe carrier having a structure that a single-stranded DNA probe can be immobilized to a carrier effectively and forms of probe dots or spots immobilized to the carrier can be observed accurately by a scanning probe microscope or its derivative technology. A gold-containing film is formed in an area of the carrier where the single-stranded DNA probe is immobilized and the single-stranded DNA probe is immobilized to this film through a sulfur atom.